## **CLAIM AMENDMENTS**

1. (Previously Presented) A process for preparing a compound of formula (I), or a salt thereof:

where R<sup>1</sup> and R<sup>2</sup> are each independently protecting groups which, together with the oxygen atoms to which they are attached, form part of a dioxane or dioxolane ring; and R<sup>3</sup> is hydrogen or a protecting group;

including the steps of:

- (a) protecting the hydroxyl group at the C-6 position of *N*-acetyl-D-mannosamine, to give a 6-*O*-protected-*N*-acetyl-D-mannosamine, wherein the hydroxyl protecting group at the C-6 position is selected from the group consisting of a silyl group, a benzyl group, or an ester group;
- (b) reducing the C-1 anomeric carbon atom of the 6-O-protected-N-acetyl-D-mannosamine using a reducing agent selected from the group consisting of a metal hydride reducing agent or hydrogen gas/metal catalyst to give a 6-O-protected-N-acetyl-D-mannitol;
- (c) protecting the four hydroxyl groups of the 6-O-protected-N-acetyl-D-mannitol with protecting groups  $R^1$  and  $R^2$  as defined above;
- (d) removing the *N*-acetyl protecting group using basic conditions and optionally removing the C-6 oxygen atom protecting group using basic conditions to give the compound of formula (I).

## 2. (Canceled)

- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Canceled)
- 7. (Canceled)
- 8. (Previously Presented) A process according to claim 1 where 2,2-dimethoxypropane in the presence of acetone is used to protect the four hydroxyl groups of the 6-*O*-protected-*N*-acetyl-D-mannitol in step (c), to give a 1:3,4:5-di-*O*-isopropylidene-D-mannitol.
- 9. (Previously Presented) A process according to claim 1 where both the *N*-acetyl protecting group and the C-6 oxygen atom protecting group are removed in step (d).
  - 10. (Canceled)
- 11. (Currently Amended) A process according to claim 1 further comprising: the steps of:
  - (e) oxamoylation of the compound of formula (I) to give a 2-oxamoylamino-D-mannitol;
  - (f) removal of the R<sup>3</sup> protecting group using basic conditions, where R<sup>3</sup> is not H;
  - (g) oxidation of the C-6 carbon atom to give a 2-oxamoylamino-D-mannose;
  - (h) double cyclisation of the 2-oxamoylamino-D-mannose using a methanolic ammonia solution to give kifunensine with four protected hydroxyl groups; and
  - (i) removal of the four hydroxyl protecting groups using acidic conditions to give kifunensine.

- 12. (Original) A process according to claim 11 where the removal of the R<sup>3</sup> protecting group in step (f) is carried out after the oxamoylation step (e).
- 13. (Original) A process according to claim 11 where the removal of the R<sup>3</sup> protecting group in step (f) is carried out after the oxamoylation step (e) and before the oxidation step (g).
- 14. (Original) A process according to claim 11 where oxamic acid and 1,1'-carbonyldiimidazole are used for the oxamoylation of the compound of formula (I) in step (e).
- 15. (Original) A process according to claim 11 where the oxamoylation step (e) is a direct coupling of the compound of formula (I) with ethyl oxamate, oxalic acid monon-butyl ester or di-n-butyl oxalate.
- 16. (Original) A process according to claim 11 where pyridinium dichromate in the presence of activated molecular sieves and pyridinium trifluoroacetate is used for the oxidation of the C-6 carbon atom in step (g).
  - 17. (Original) A process for preparing kifunensine including the steps of:
    - (a) silylation of N-acetyl-D-mannosamine using tert-butyldiphenylsilyl chloride as silylating agent, to give 6-O-tert-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannose;
    - (b) reduction of 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannose using sodium borohydride as reducing agent, to give 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannitol;
    - (c) protection of the four hydroxy groups of 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannitol using 2,2-dimethoxypropane in the presence of acetone, to give 6-*O-tert*-butyldiphenylsilyl-2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-acetylamino-D-mannitol;
    - (d) double deprotection of the 6-*O* and *N*-protecting groups of 6-*O*-tert-butyldiphenylsilyl-2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-acetylamino-D-

- mannitol using aqueous barium hydroxide, to give 2-amino-2-deoxy-1,3:4,5-di-*O*-isopropylidene-D-mannitol;
- (e) oxamoylation of 2-amino-2-deoxy-1,3:4,5-di-*O*-isopropylidene-D-mannitol using oxamic acid and 1,1'-carbonyldiimidazole, to give 2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-oxamoylamino-D-mannitol;
- (f) oxidation of 2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-oxamoylamino-D-mannitol using pyridinium dichromate in the presence of activated molecular sieves and pyridinium trifluoroacetate, to give 5-deoxy-2,3:4,6-di-*O*-isopropylidene-2-oxamoylamino-D-mannose;
- (g) double cyclisation of 5-deoxy-2,3:4,6-di-*O*-isopropylidene-2-oxamoylamino-D-mannose using a methanolic ammonia solution, to give 2,3:4,6-di-*O*-isopropylidene-kifunensine; and
- (h) deprotection of 5,6:7,8-di-O-isopropylidene-kifunensine, using methanolic hydrochloric acid, to give kifunensine.

## 18. (Canceled)

- 19. (Previously Presented) A process according to claim 1 where the hydroxyl protecting group at the C-6 position of *N*-acetyl-D-mannosamine in step (a) is a silyl protecting group.
- 20. (Previously Presented) A process according to 19 where the silyl protecting group is *tert*-butyldiphenylsilyl.
- 21. (Previously Presented) A process according to claim 1 where the basic conditions in step (d) are selected from aqueous barium hydroxide or sodium *n*-butoxide in *n*-butanol.
- 22. (Previously Presented) A process according to claim 11 where the basic conditions in step (f) are selected from aqueous barium hydroxide or sodium *n*-butoxide in *n*-butanol.

23. (Previously Presented) A process according to claim 11 where the acidic conditions in step (i) are selected from methanolic hydrochloric acid or trifluoroacetic acid.